UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,309	05/08/2001	Stephan Bork	TI-30221	3093

23494 7590 11/17/2004

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265

EXAMINER	
LE, LANA N	

ART UNIT	PAPER NUMBER
2685	4

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,309	BORK ET AL.	
	Examiner	Art Unit	
	Lana Le	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the phrase "such that" after "..sequence definition" at line 15 and again at line 16 after "signal" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

3. Claim 1 recites the limitation ---the at least one predetermined value....--- in lines 8-9. There is insufficient antecedent basis for this limitation in the claim. ---at least one predetermined value---- is suggested for correction without including ----the-----.

Claim Objections

4. Claim 16 is objected to because of the following informalities: "A apparatus..." at the beginning of the claim should be "An apparatus...". Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-3, 5, 7-9, 13-15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al (US 5,870,684) in view of Link, II et al (US 6,735,457).

Regarding claim 1, Hoashi et al disclose an apparatus (fig. 1), comprising:

a microphone 111 (col 2, lines 50-52);

a codifier (inherent within the noise level measurement 113 since the output is digitized) coupled to a microphone 111 (to convert the received electric signal from the microphone to digital form) (col 2, lines 54-60);

a central processing unit (controller 112) coupled to the codifier (inherent within the noise level measurement 113 since its output is digitized) to control the codifier to convert an analog signal sensed by the microphone 111 into a digital signal (col 2, lines 50-60);

at least one alert generator (121) coupled to a central processing unit (112-114) for generation of the at least one alert signal (col 2, lines 61-66);

an inherent memory coupled to the central processing unit for storage of the at least one predetermined value (storage of the reference value to be recalled when it is to be compared to the measured value; col 2, lines 59-60); and

wherein a program of instructions from controller 112 and the at least one predetermined value define an alert sequence definition (col 2, lines 52-67; the controller determines after a number of times to obtain the mean value and the need to raise the volume level of the alert signal based on the received average value and a reference value and sequentially lower or raise the volume level and repeating the step of determining for the next set of times of receiving an electrical signal from microphone 111; col 2, lines 52-60);

the central processing unit (112-114) responsive to the digital signal from 113 being digitized by an inherent codifier within 113 coupled to the microphone 111 (col 2, line 56) and the alert sequence definition (reference value) such that the central processing unit will determine an alert signal by comparing the reference value with the measured sample value from the microphone 111 and generating a control signal at 114 to adjust the electrical signal output from the alert tone generator 121 (col 2, lines 50-60) such that the central processing unit generates at least one control signal at 114 based on the surrounding noise level and a mean value produced from the reference value inherently stored in the memory at the output of the digital signal's measurement 113 for the at least one alert generator 121 to generate the alert signal (col 2, lines 54-67).

Hoashi didn't specifically disclose: a programmable storage device readable by the central processing unit, the programmable storage device tangibly embodying a program of instructions executable by the central processing unit.

However, the logic method steps which controller 112 executes the instructions to control signal generator is based a logic step of comparing with a reference value for the need to adjust the volume of the alert signal which is well known in the art to be a program of instructions executed by the controller as taught by Link II.

Link, II et al discloses:

a programmable storage device 106 readable by the central processing unit the programmable storage device tangibly embodying a program of instructions executable by the central processing unit. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have a programmable storage device in order to execute and carry out the steps of the controller sending the control signal after it determines that the alert generator needs to raise or lower the volume of the ring tone.

Regarding claim 2, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al further disclose the apparatus further comprising:

a transceiver 101, 102 coupled to the central processing unit 104 to communicate with an external device; and

the central processing unit responsive to a transmitted signal of the external device received by the transceiver such that the central processing unit will generate a control signal for the codifier to convert an analog signal sensed by the microphone into a digital signal (when the noise level measurement 113 digitized the signal from the microphone; col 2, lines 55-57).

Regarding claim 3, Hoashi et al and Link II et al disclose an apparatus as recited in claim 2, Hoashi et al further disclose the apparatus comprising:

an inherent decoder coupled to the central processing unit; and

a speaker 123 (fig. 1) mounted in the housing, the speaker coupled to the decoder;

the central processing unit (112-114) responsive to a transmitted signal of the external device received by the transceiver (inherent within the conventional radio communication apparatus) such that the central processing unit (112-114) will generate a control signal (at 114) for the speaker (123) to generate a signal and a control signal (within the noise level measurement 113) for the codifier (inherent within noise level measurement circuit 113 since its output is digitized) to convert the reflected signal sensed by the microphone 111 into a digital signal (its output is digitized; col 2, lines 54-57);

the central processing unit (112-114) responsive to the reflected signal to determine strength of the reflected signal (samples the electric and find signal strength based on measured noise level) such that the strength is compared with at least one of the at least one predetermined threshold stored in memory (reference value) to determine an optimum alert signal (the optimum level of the alert signal is adjusted by volume controller 122 being directed by a command from control signal generator 114; col 2, lines 57-67).

Regarding claim 5, Hoashi et al and Link II et al disclose an apparatus as recited in claim 3, wherein Hoashi et al further discloses the at least one alert generator includes:

an audio alert generator 121 (fig. 1) coupled between the central processing unit and the speaker for generation of an audible alert signal (fig. 1).

Regarding claim 7, Hoashi et al and Link II et al disclose an apparatus as recited in claim 5, wherein Hoashi discloses the central processing unit responsive to the alert sequence definition, adjusts the volume of audible alert signal via 122 (col 2, lines 63-65).

Regarding claim 8, Hoashi et al and Link II et al disclose an apparatus as recited in claim 5, wherein the central processing unit responsive to the alert sequence definition, adjusts the frequency of audible alert signal by increasing the urgency of the sound when a siren sound is used (col 4, lines 34-36).

Regarding claim 9, Hoashi et al and Link II et al disclose an apparatus as recited in claim 5, wherein Hoashi et al further disclose the central processing unit responsive to the alert sequence definition, adjusts the interval of time for silence between a first and a second audible alert signal by changing the pattern of audible tone from a ring to a siren in which the time of silence in between a first and second audible alert signal is increased in terms of urgency (col 4, lines 34-36).

Regarding claim 13, Hoashi et al and Link II et al disclose an apparatus as recited in claim 3, Hoashi et al disclose the apparatus further comprising a housing 110, 120 wherein the microphone 111, the speaker 123, the inherent transceiver of the conventional radio communication apparatus, and the at least one inherent manually actuated user input from a keypad are mounted in the housing of the conventional radio communication apparatus (fig. 1).

Regarding claim 14, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al inherently disclose one of the at least one predetermined value (reference value) includes at least one high frequency noise range so that the controller will determine to raise the volume (col 2, lines 58-60).

Regarding claim 15, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al inherently disclose one of the at least one predetermined value (reference value) includes at least one low frequency noise range so that the controller will determine to lower the volume (col 2, lines 58-60).

7. Claims 4 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al and Link II et al as applied to claim 3 above, and further in view of Bussan et al (US 6,625,474).

Regarding claim 4, Hoashi et al and Link II et al disclose an apparatus as recited in claim 3, wherein they didn't further disclose the at least one alert generator includes:

a display mounted in the housing and coupled to the central processing unit, the display having at least one feature for generation of a visual alert signal.

Bussan et al discloses the at least one alert generator includes: a display 104 mounted in the housing and coupled to the central processing unit, the display having at least one feature for generation of a visual alert signal as a flashing display as other signals than audio from the alert generator (fig. 3; col 2, lines 49-50). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have a

visual alert in order to alternatively alert the user in other ways when the environment is too noisy to produce an audible sound that can be heard.

Regarding claim 10, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein they didn't further disclose the at least one alert generator includes: a tactile alert generator coupled to the central processing unit for generation of a tactile alert signal. Bussan et al further discloses alternative other signals from the alert generator to produce a vibrating signal at 104. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have a tactile alert in order to notify the user of an incoming call in other ways when the environment is too noisy to produce an audible sound.

8. Claims 6, 18 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al (US 5,870,684).

Regarding claim 6, Hoashi et al and Link II et al disclose an apparatus as recited in claim 5, wherein Hoashi et al (fig. 1) do not disclose the central processing unit is responsive to the alert sequence definition, adjusts the type of audible alert signal Hoashi et al (fig. 3) disclose the central processing unit is responsive to the alert sequence definition, adjusts the type of audible alert signal (col 4, lines 34-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the type of audible alert in order to allow the user to be alerted of a particular type of signal suitable to the type of situation the mobile user is in, i.e. a siren for an emergency alert as suggested by Hoashi et al (col 4, lines 34-36; col 5, lines 56-62).

Regarding claim 18, Hoashi et al and Link II disclose an apparatus as recited in claim 1, wherein Hoashi et al (fig. 1) and Link II fail to disclose the apparatus further comprising an inherent radio link transceiver coupled to the central processing unit, the radio link transceiver positioned in the housing of the conventional radio communication apparatus to communicate with a base station as is inherently well known in the art of cellular communication system, wherein the predetermined values (reference value), and the program of instructions define the alert sequence definition.

Hoashi et al (fig. 3) disclose the apparatus further comprising a radio link transceiver coupled to the central processing unit 104, the radio link transceiver 101, 102 positioned in the housing to communicate with a base station, wherein a transmitted signal from the base station (incoming call through antenna 107) wherein the transmitted signal from the base station define the alert sequence definition (by adjusting/changing the alert signal through a sequence when the call goes unanswered after a number of counts). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the incoming call as an alert sequence definition in order to base the alert sequence on the number of incoming calls to the mobile station to increase its volume or change the type of alert after a sequence of times of non-responsive call from the base station is received as suggested by Hoashi et al (col 3, line 49 – col 4, line 36).

Regarding claim 24, Hoashi et al disclose a method of generating an optimum alerting sequence for a wireless communication device (fig. 1 and hereafter; col 2, lines 39-67) having a central processing unit (112-114), a codifier (inherent within 113 to

digitize an electric signal), a memory (col 2, lines 59-60), an alert generator 121 (col 2, lines 50-67), comprising the steps of:

sending a control signal from (112) to the codifier (inherent within 113) coupled to a microphone (111) to receive the analog signal sensed at the microphone (electrical signal sensed by the microphone 111 (col 2, lines 52-67);

converting the analog signal to a digital signal (digitizing the electrical signal at 113);

retrieving a predetermined set of values (reference value) and coefficients (mean value) from memory (inherent within controller 112) (col 2, lines 54-60);

processing the digital signal by the central processing unit to determine an optimum alerting sequence using the predetermine set of values, coefficients, and the digital signal as inputs for the control steps programmed in the storage device within 112 (col 2, lines 52-67; the controller determines after a number of times to obtain the mean value and the need to raise the volume level of the alert signal based on the received average value and a reference value and sequentially lower or raise the volume level and repeating the step of determining for the next set of times of receiving an electrical signal from microphone 111); and

generating an alert signal based upon the output of the controller 112's control instructions.

Hoashi et al (fig.1) do not disclose detecting by the central processing unit an. incoming call. Hoashi et al (figs. 3, 4) disclose detecting by the central processing unit an incoming call (step 203; fig. 4).

Hoashi didn't specifically disclose: a programmable storage device readable by the central processing unit, the programmable storage device tangibly embodying a program of instructions executable by the central processing unit. However, the logic method steps which controller 112 executes the instructions to control signal generator is based a logic step of comparing with a reference value for the need to adjust the volume of the alert signal which is well known in the art to be a program of instructions executed by the controller as taught by Link II.

Link, II et al discloses:

a programmable storage device 106 readable by the central processing unit the programmable storage device tangibly embodying a program of instructions executable by the central processing unit. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to have a programmable storage device in order to execute and carry out the steps of the controller sending the control signal after the controller of Hoashi et al and Link II determines that the alert generator needs to raise or lower the volume of the ring tone.

9. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al and Link II et al as applied to claim 1 above, and further in view of Mottier et al (US 5,696,497).

Regarding claim 11, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein they didn't disclose the apparatus further comprising:

at least one manually actuated user input coupled to the central processing unit; wherein the programmable storage device responsive to the at least one manually actuated user input to alter the last alert signal generated. Mottier et al discloses at least one manually actuated user input coupled to central processing unit 20; wherein the programmable storage device responsive to the at least one manually actuated user input to alter the last alert signal generated (col 3, lines 13-26). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to allow the user the alternative to change the alert signal

Regarding claim 12, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein they didn't further disclose the apparatus comprising:

at least one manually actuated user input coupled to the central processing unit; wherein the programmable storage device responsive to the at least one manually actuated user input to alter the alert sequence definition.

Mottier et al discloses at least one manually actuated user input coupled to the central processing unit; wherein the programmable storage device responsive to the at least one manually actuated user input to alter the alert sequence definition, i.e. to all silent alert during the time the user is in a quiet environment or to all audible alert when the user is not wearing the phone (col 3, lines 13-19). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to allow the user.

10. Claims 16-17 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al and Link II et al and further in view of Tomabechi (US 6,026,358).

Regarding claim 16, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al and Link II et al fail to further disclose the program of instructions includes speech recognition processing instructions. Hoashi et al disclose the program of instructions includes speech recognition processing instructions (col 6, lines 64 – col 7, line 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have speech recognition processing instructions of in Hoashi et al in order to recognize voice input at the microphone characterized as noise more easily by distinguish phonemes within the programs used by the CPU for processing by speech recognition.

Regarding claim 17, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al and Link II et al fail to further disclose the program of instructions includes neuron network processing instructions. Tomabechi discloses the program of instructions includes neuron network processing instructions (col 5, lines 29-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include neuron network processing instructions in the program of instructions in order to have an improved performance based on learning by trial and error as suggested by Tomabechi; col 5, lines 29-40).

Regarding claim 25, Hoashi et al and Link II et al disclose a method as recited in 24, wherein the program of instructions includes speech recognition processing

instructions to process a speech pattern recognized in the digital signal as input to determine the optimum alert sequence. Tomabechi discloses the program of instructions includes speech recognition processing instructions to process a speech pattern recognized in the digital signal as input to determine the optimum alert sequence (col 6, line 64 – col 7, line 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to the program of instructions includes speech recognition processing instructions in order to recognize voice input at the microphone characterized as noise more easily by distinguish phonemes within the programs used by the CPU for processing by speech recognition.

Regarding claim 26, Hoashi et al and Link II et al disclose a method as recited in claim 24, wherein the program of instructions includes neuron network processing instructions to determine the optimum alert sequence. Hoashi et al and Link II et al fail to further disclose the program of instructions includes neuron network processing instructions. Tomabechi discloses the program of instructions includes neuron network processing instructions (col 5, lines 29-40). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include neuron network processing instructions in the program of instructions of Hoashi et al and Link II et al to find the optimum alert sequence in order to have an improved performance of obtaining the desired output based on learning by trial and error as suggested by Tomabechi; col 5, lines 29-40).

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al (US 5,870,684) and Link II et al in view of Pettersson (US 6,615,057).

Regarding claim 19, Hoashi et al and Link II et al disclose an apparatus as recited in claim 18, wherein Hoashi et al further discloses the radio link transceiver uses a radio link (col 3, lines 24-26). Hoashi et al and Link II fail to disclose the radio link transceiver uses a short-range, cable replacement, radio technology such as Bluetooth TM. However, it is notoriously well known in the art of wireless communication that the radio frequency range comprises the short range frequency as taught by Pettersson (US 6,615,057). Pettersson et al disclose a transceiver that uses a short range link within mobile unit 403 at antenna 401 (fig. 4; col 6, lines 62-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to communicate short-range link to communicate with other nearby peripheral devices, i.e. the nearby subscriber identity unit.

12. Claim 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al and Link II et al as applied to claim 1 above, and further in view Dutta et al (US 6,748,210).

Regarding claim 20, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al disclose the predetermined values, and the program of instructions define the alert sequence definition (to raise the volume of the alert signal each time the noise level measurement is above the reference value; col 2, lines 52-60). Hoashi et al and Link II et al fail to disclose the apparatus further

comprising a light sensor coupled to the central processing unit to sense light external to the portable wireless communication device, wherein the sensed light defines the alert sequence definition. Dutta et al the apparatus further comprising a light sensor (24) coupled to the central processing unit to sense light external to the portable wireless communication device, wherein the sensed light defines the alert sequence definition (col 3, lines 8-17 wherein depending on an a range, if the sensed light intensity is within the range the alert sequence goes to the voice mail, and if the intensity is outside the range, it rings the mobile). It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the noise sensor of Hoashi et al and Link II with the light sensor of Dutta et al in order to alert the user based on light sensor and not disturb the mobile user if the light level is low, i.e. the user is asleep.

13. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoashi et al and Link II et al as applied to claim 1 above, and further in view of Merriam (US 6,408,187).

Regarding claim 21, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al disclose the predetermined values, and the program of instructions define the alert sequence definition (to raise the volume of the alert signal each time the noise level measurement is above the reference value; col 2, lines 52-60). Hoashi et al and Link II et al fail to disclose the apparatus further comprising a motion sensor coupled to the central processing unit to sense motion

exerted on the portable wireless communication device, wherein the predetermined values, and the program of instructions define the alert sequence definition. Merriam discloses the apparatus further comprising a motion sensor (112; col 4, lines 1-8; figs. 1-2) coupled to a central processing unit 104 to sense motion exerted on the portable wireless communication device 100, wherein the sensed motion define the alert sequence definition (fig. 2, behavior of motion sensor, i.e. if motion of the user is detected, to use another type of alert than audio in which the user might not hear, i.e. vibrate and then sequentially change to another type of alert, visual after a number of times of non-responsive calls; col 5, lines 15-35; col 5, lines 4-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a motion sensor in order to detect movement around the vicinity of the device of Hoashi and Link II and alert the user in other ways to make sure the user acknowledge the alert signal.

Regarding claim 22, Hoashi et al and Link II et al disclose an apparatus as recited in claim 1, wherein Hoashi et al disclose the predetermined values, and the program of instructions define the alert sequence definition (to raise the volume of the alert signal each time the noise level measurement is above the reference value; col 2, lines 52-60). Hoashi et al and Link II et al fail to disclose the apparatus further comprising a temperature sensor coupled to the central processing unit to sense temperature external to the portable wireless communication device, wherein the sensed temperature define the alert sequence definition. Merriam discloses a temperature sensor (heat sensor) coupled to the central processing unit (104) to sense

temperature external to the portable wireless communication device (100; col 3, lines 61-67), wherein the sensed temperature define the alert sequence definition (wherein if body heat of the mobile's user is sensed/affirmed, the alert signal is one of vibrate and then sequentially visual if the user hasn't acknowledge the alert signal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lana N Le whose telephone number is (703) 308-5836. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F Urban can be reached on (703) 305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lana Le

November 14, 2004